

Amendments To The Claims:

Please amend the claims as shown.

1 – 7 (canceled)

8. (currently amended) A turbine rotor shaft, comprising:

a middle region consisting of a middle bloc, having a middle region material and a longitudinal axis and having a first end face oriented perpendicular to the longitudinal axis and arranged at an a first end of the middle region and a second end face arranged at a second end of the middle region opposite the first end face;

a first outer region consisting of a first bloc, having a first material and arranged coaxially with the longitudinal axis abutting the first end face of the middle region, comprising a first bearing surface configured to receive a first bearing which mounts the first outer region to the turbine, wherein when disposed in a steam turbine the first outer region abuts the first end face of the middle region upstream of a last row of blades within a high pressure part of the steam turbine; and

a second outer region consisting of a second bloc, having a second material and arranged coaxially with the longitudinal axis and abutting the second end face of the middle region, comprising a second bearing surface configured to receive a second bearing which mounts the second outer region to the turbine,

wherein the middle region material has a higher heat resistance than the first and second materials.

9. (previously presented) The turbine shaft as claimed in claim 8, wherein the first and second outer regions are welded to the middle region.

10. (previously presented) The turbine shaft as claimed in claim 9, wherein the middle region material is a forging steel having 9 to 12% by weight of chromium and the first and second materials are steels having 1 to 2% by weight of chromium.

11. (previously presented) The turbine shaft as claimed in claim 10, wherein the first and second outer region materials are different.

12. (currently amended) The turbine shaft as claimed in claim 11, wherein the middle region is exposed to steam at ~~550~~565°C and 250 bar.

13 (previously presented) The turbine shaft as claimed in claim 8, wherein the middle region material is nickel based.

14. (currently amended) A method for manufacturing a turbine shaft, comprising:
producing a first outer region from a first bloc of a material that is less heat-resistant than the middle region material, the first outer region comprising a first bearing surface configured to receive a first bearing which mounts the first outer region to a turbine, and further configured to, when disposed in a steam turbine, abut the middle region upstream of a last row of blades within a high pressure part of the steam turbine;

producing a second outer region from a second bloc of a material that is less heat-resistant than the middle region material, the second outer region comprising a second bearing surface configured to receive a second bearing which mounts the second outer region to the turbine; and

welding the first and second outer regions to opposite ends of the middle region.

15. (previously presented) A steam turbine, comprising:
a turbine shaft arranged coaxial with a rotational axis of the turbine wherein the shaft has
a middle region consisting of a middle bloc, having a middle region material and first and
second end faces oriented perpendicular to the longitudinal axis of the shaft arranged at opposite
ends of the middle region,
a first outer region consisting of a first bloc, the first outer region comprising a first
bearing surface configured to receive a first bearing which mounts the first outer region to a
turbine, the first outer region having a first material and arranged coaxially with the longitudinal
axis abutting the first end face of the middle region, and
a second outer region consisting of a second bloc, the second outer region comprising a
second bearing surface configured to receive a second bearing which mounts the second outer
region to the turbine, the second outer region having a second material and arranged coaxially
with the longitudinal axis and abutting the second end face of the middle region wherein the
middle region material has a higher heat resistance than the first and second materials;
a plurality of blades attached to the first outer and second outer regions of the turbine
shaft;
an inner casing surrounding the turbine shaft;
a plurality of vanes attached to an inner surface of the inner casing; and
an outer casing that surrounds the inner casing.

16 (previously presented) The turbine shaft as claimed in claim 13, wherein the first
and second materials are steels having 9 to 12% by weight chromium fraction.

17 (previously presented) The turbine shaft as claimed in claim 13, wherein the first
and second materials are steels having approximately 3.5% by weight of nickel.

18. (previously presented) The turbine shaft as claimed in claim 8, wherein the
middle region material is a forging steel having 9 to 12% by weight of chromium and the first
and second materials are steels having 3.5% by weight of nickel.